

In the Claims

Claims 1-42 were originally filed; Claim 11 has been canceled without prejudice or disclaimer; and Claims 43 and 44 were previously added.

Claims 1-10 and 12-44 are pending.

1. (Original) A television tuner comprising:
a country table listing a plurality of countries;
multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and

a tuning device to tune to a particular frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

2. (Original) A television tuner as recited in claim 1, wherein the country table lists the countries according to a uniquely assigned country code.

3. (Original) A television tuner as recited in claim 1, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

1 4. (Original) A television tuner as recited in claim 1, wherein the
2 channel-to-frequency mapping tables also contain a television standard for the
3 associated countries.

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5 5. (Original) A television tuning component for a television tuning
6 system, comprising:

7 a country table listing a plurality of countries; and

8 multiple channel-to-frequency mapping tables correlating channel numbers
9 to corresponding frequencies for associated countries in the country table, the
10 channel-to-frequency mapping tables being indexed by the country table so that
11 selection of a country in the country table references an associated channel-to-
12 frequency mapping table for the selected country and selection of a channel in the
13 channel-to-frequency mapping table maps to a corresponding frequency.

14
15 6. (Original) A television tuning component as recited in claim 5,
16 wherein the country table lists the countries according to a uniquely assigned
17 country code.

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19 7. (Original) A television tuning component as recited in claim 5,
20 wherein the country table lists the countries according to an International
21 Telecommunications Union (ITU) code.
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1 8. (Original) A television tuning component as recited in claim 5,
2 wherein the channel-to-frequency mapping tables also contain a television
3 standard for the associated countries.

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5 9. (Original) A television tuning component as recited in claim 5,
6 embodied in software as a dynamic linked library stored on a computer-readable
7 storage medium.

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9 10. (Original) A television tuner incorporating the television tuning
10 component as recited in claim 5.

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12 11. Canceled

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14 12. (Previously Amended) A tuner, comprising:
15 tuner circuitry to tune to various television frequencies carrying television
16 video signals;

17 a tuner module coupled to adjust the tuner circuitry to scan multiple
18 channels within a particular locale for corresponding tuning frequencies, the tuner
19 module storing the tuning frequencies for the particular locale;

20 upon transporting the tuner to a new locale, the tuner module scans multiple
21 channels within the new local for corresponding tuning frequencies; and

22 upon transporting the tuner back to the particular locale, the tuner retrieves
23 the stored tuning frequencies to restore operation in the particular locale.

1 13. (Original) A television tuning system comprising:
2 tuner circuitry to tune to various television frequencies carrying television
3 video signals;
4 video decoder circuitry coupled to receive a television video signal from the
5 tuner circuitry and to convert the television video signal to digital video data;
6 a tuner module coupled to adjust the tuner circuitry to a particular television
7 frequency;
8 a video decoder module to decode the digital video data according to a
9 particular video standard;
10 wherein the tuner module has a country table listing a plurality of countries
11 and multiple channel-to-frequency mapping tables that provide video standards
12 and correlate channel numbers to corresponding frequencies for associated
13 countries in the country table, the channel-to-frequency mapping tables being
14 indexed by the country table so that selection of a country in the country table
15 references an associated channel-to-frequency mapping table for the selected
16 country; and
17 wherein the tuner module selects a channel-to-frequency mapping table
18 based upon input of a particular country and outputs a video standard to the video
19 decoder for use in decoding the digital video data, the tuner module further
20 selecting a television frequency from the selected channel-to-frequency mapping
21 table based upon input of a corresponding channel and outputting the selected
22 television frequency to the tuner circuitry to cause the tuner circuitry to tune to the
23 selected television frequency.
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1 14. (Original) A television tuning system as recited in claim 13,
2 wherein the country table lists the countries according to an International
3 Telecommunications Union (ITU) code.

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5 15. (Original) A television tuning system as recited in claim 13,
6 wherein the tuner module is embodied as a dynamic linked library.

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8 16. (Original) A television tuning system as recited in claim 13,
9 further comprising a second tuner module different from the tuner module, the
10 second tuner module being used to replace the tuner module during upgrade
11 without replacing the tuning circuitry and the decoding circuitry.

12
13 17. (Original) A television tuning system as recited in claim 13,
14 wherein the tuner module supports an application program interface to expose
15 functionality of the tuner module to an application program.

16
17 18. (Original) A television tuning system as recited in claim 13,
18 wherein the tuner module stores a set of television frequencies that map to
19 corresponding channels within the particular country for subsequent retrieval.

20
21 19. (Original) A television tuning manager for a television tuner, the
22 television tuning manager being implemented in software stored on a computer-
23 readable storage medium, the television tuning device comprising:

24 a country table listing a plurality of countries;
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multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country;

a code segment to select a channel-to-frequency mapping table based upon input of a particular country; and

a code segment to output a broadcast frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel.

20. (Original) A television tuning manager as recited in claim 19, wherein the country table lists the countries according to a uniquely assigned country code.

21. (Original) A television tuning manager as recited in claim 19, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

22. (Original) A television tuning manager as recited in claim 19, wherein the channel-to-frequency mapping tables also contain a television standard for the associated countries.

1 23. (Original) A television tuning manager as recited in claim 19,
2 further comprising a code segment to store a set of broadcast frequencies that map
3 to corresponding channels within the particular country for subsequent retrieval.

4
5 24. (Original) A television tuning manager as recited in claim 19,
6 embodied as a software dynamic linked library stored on a computer-readable
7 storage medium.

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9 25. (Original) A television tuning manager as recited in claim 19,
10 embodied as a computer software module that is dynamically accessible by an
11 application program, the television tuning manager further comprising an
12 application program interface to expose functionality of the television tuning
13 manager to the application program.

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15 26. (Original) An application program interface for a television
16 tuning system, the application program interface being embodied on a computer-
17 readable medium and having methods for performing the following functions:

18 setting a current TV channel;

19 retrieving the current TV channel;

20 setting a country code;

21 retrieving the country code;

22 setting a storage index for regional channel to frequency mappings; and

23 retrieving the storage index.
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1 27. (Original) An application program interface for a television
2 tuning system, the
3 application program interface being embodied on a computer-readable medium
4 and having methods for performing the following functions:

5 retrieving all analog video TV standards supported by the tuning system;

6 retrieving a current analog video TV standard in use;

7 setting a current TV channel;

8 retrieving the current TV channel;

9 retrieving highest and lowest channels available;

10 scanning for a precise signal on the current TV channel's frequency;

11 setting a country code;

12 retrieving the country code;

13 setting a storage index for regional channel to frequency mappings;

14 retrieving the storage index;

15 retrieving a number of TV sources plugged into the tuning system;

16 setting a type of tuning system;

17 retrieving the type of tuning system;

18 retrieving a current video frequency; and

19 retrieving a current audio frequency.

20
21 28. (Original) A method comprising the following steps:

22 receiving an ITU (International Telecommunications Union) code for a
23 particular country; and

24 selecting, based on the ITU code, a set of TV channel-to-TV frequency
25 mappings for use in the particular country.

8
9 31. (Original) A computer-readable medium having computer-
10 executable instructions for performing the steps in the method as recited in claim
11 28.

12
13 32. (Previously Amended) A method comprising the following steps:
14 receiving a reference to a country;
15 selecting, based on the country reference, a set of channel-to-frequency
16 mappings correlating channels to corresponding TV frequencies in the country;
17 receiving a channel; and
18 selecting, based on the channel, a TV frequency that maps to the channel.

19
20 33. (Original) A method as recited in claim 32, further comprising
21 the step of tuning to the TV frequency.

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23 34. (Original) A method as recited in claim 32, wherein the country
24 reference is an ITU (International Telecommunications Union) code.
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1 35. (Original) A method as recited in claim 32, further comprising
2 the step of selecting, based on the country reference, a TV standard for the
3 country.

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5 36. (Original) A method as recited in claim 32, further comprising
6 the step of scanning for a better quality frequency within the channel.

7
8 37. (Original) A method as recited in claim 32, wherein the step of
9 selecting a set of channel-to-frequency mappings comprises the following steps:
10 looking up the country in a country table that lists multiple countries; and
11 indexing from an entry for the country in the country table to a particular
12 channel-to-frequency table, the particular channel-to-frequency table containing
13 mappings of channel numbers to TV frequencies for the country.

14
15 38. (Original) A method as recited in claim 37, wherein the step of
16 selecting a TV frequency comprises the step of looking up in the particular
17 channel-to-frequency table a TV frequency that corresponds to the channel.

18
19 39. (Previously Presented) A computer-readable medium having
20 computer-executable instructions for performing the steps in the method as recited
21 in claim 32.

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23 40. (Previously Presented) A method comprising the following steps:
24 configuring a tuning system for operation in a first locale by determining
25 tuning frequencies for an associated set of television channels;

6
7 41. (Previously Presented) A method as recited in claim 40, wherein the
8 configuring step comprises the step of scanning for optimal tuning frequencies for
9 the associated set of television channels.

10
11 42. (Previously Presented) A computer-readable medium having
12 computer-executable instructions for performing the steps in the method as recited
13 in claim 40.

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15 43. (Previously Presented) A tuning system comprising:
16 a country table listing a plurality of countries; and,
17 multiple channel-to-frequency mapping tables correlating channel numbers
18 to corresponding frequencies for associated countries in the country table, the
19 channel-to-frequency mapping tables being indexed by the country table so that
20 selection of a country in the country table references an associated channel-to-
21 frequency mapping table for the selected country, and wherein said tuning system
22 adjusts to a particular video standard based on a selected channel from one of the
23 multiple channel-to-frequency mapping tables.
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cancel.

44. (Previously Presented) One or more computer-readable media having computer readable instructions thereon which, when executed by a computer, cause the computer to:

- receive data regarding a selected country;
- map to channels available for the selected country;
- receive data regarding a selected channel;
- map to an appropriate video standard based on at least one of the selected country and selected channel; and,
- format a tuning component to the appropriate video standard.
